

# SEQUENCE LISTING

<110> Dhugga, Kanwarpal S.  
Wang, Haiyin

<120> Maize Cellulose Synthases and Uses  
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<151> 1999-08-06

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Lys Val Ser Cys Tyr Val Ser Asp Asp Gly Ser Ala Met Leu Thr Phe
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<210> 28
<211> 1007
<212> PRT
<213> Zea mays

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Glu Arg Val Thr Met Gly Ser His Leu Asn Asp Arg Gln Asp Glu Val
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Ser His Ala Arg Thr Met Ser Ser Leu Ser Gly Ile Gly Ser Glu Leu
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Lys Glu Lys Lys Asn Glu Lys Lys Ala Ser Ala Lys Lys Thr Ala Ala
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165       170       175
Asn Lys Leu Thr Pro Tyr Arg Ala Val Ile Ile Met Arg Leu Ile Val
180       185       190
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195       200       205
Phe Gly Leu Trp Met Thr Ser Val Ile Cys Glu Ile Trp Phe Gly Phe
210       215       220
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Thr Tyr Val Asp Arg Leu Ile Ala Arg Tyr Gly Asp Gly Glu Glu Ser
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 <211> 3443  
 <212> DNA  
 <213> Zea mays

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<210> 30
<211> 1052
<212> PRT
<213> Zea mays

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Ser Gly Gln Val Cys Glu Ile Cys Gly Asp Glu Val Gly Leu Thr Val
      35             40             45
Asp Gly Asp Leu Phe Val Ala Cys Asn Glu Cys Gly Phe Pro Val Cys

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<210> 32  
 <211> 28  
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 <223> GSP1 forward primer

<400> 32  
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<210> 33  
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 <212> DNA  
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<220>  
 <223> GSP2 reverse primer

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<210> 34  
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<220>  
 <223> Mu TIR primer

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<213> Zea mays

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<210> 36  
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<210> 41  
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<223> n = A,T,C or G

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 <212> PRT  
 <213> Zea mays

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 165 170 175  
 Asp Leu Ala Ala Tyr Gly Tyr Gly Ser Val Ala Trp Lys Glu Arg Met  
 180 185 190  
 Glu Ser Trp Lys Gln Lys Gln Glu Arg Met His Gln Thr Arg Asn Asp  
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 Gly Gly Gly Asp Asp Gly Asp Asp Ala Asp Leu Pro Leu Met Asp Glu  
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 Ala Arg Gln Pro Leu Ser Arg Lys Ile Pro Leu Pro Ser Ser Gln Ile  
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          35          40          45
Ala Pro Gly Gly Asp Pro Phe Val Ala Cys Asn Glu Cys Ala Phe Pro
          50          55          60
Val Cys Arg Asp Cys Tyr Glu Tyr Glu Arg Arg Glu Gly Thr Gln Asn
          65          70          75          80
Cys Pro Gln Cys Lys Thr Arg Tyr Lys Arg Leu Lys Gly Cys Gln Arg
          85          90          95
Val Thr Gly Asp Glu Glu Glu Asp Gly Val Asp Asp Leu Asp Asn Glu
          100          105          110
Phe Asn Trp Asp Gly His Asp Ser Gln Ser Val Ala Glu Ser Met Leu
          115          120          125
Tyr Gly His Met Ser Tyr Gly Arg Gly Gly Asp Pro Asn Gly Ala Pro
          130          135          140
Gln Ala Phe Gln Leu Asn Pro Asn Val Pro Leu Leu Thr Asn Gly Gln
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Met Val Asp Asp Ile Pro Pro Glu Gln His Ala Leu Val Pro Ser Phe
          165          170          175
Met Gly Gly Gly Gly Lys Arg Ile His Pro Leu Pro Tyr Ala Asp Pro
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Ser Leu Pro Val Gln Pro Arg Ser Met Asp Pro Ser Lys Asp Leu Ala
          195          200          205
Ala Tyr Gly Tyr Gly Ser Val Ala Trp Lys Glu Arg Met Glu Asn Trp
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Lys Gln Arg Gln Glu Arg Met His Gln Thr Gly Asn Asp Gly Gly Gly
          225          230          235          240
Asp Asp Gly Asp Asp Ala Asp Leu Pro Leu Met Asp Glu Ala Arg Gln
          245          250          255
Gln Leu Ser Arg Lys Ile Pro Leu Pro Ser Ser Gln Ile Asn Pro Tyr
          260          265          270
Arg Met Ile Ile Ile Ile Arg Leu Val Val Leu Gly Phe Phe Phe His
          275          280          285
Tyr Arg Val Met His Pro Val Asn Asp Ala Phe Ala Leu Trp Leu Ile
          290          295          300
Ser Val Ile Cys Glu Ile Trp Phe Ala Met Ser Trp Ile Leu Asp Gln
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Phe Pro Lys Trp Phe Pro Ile Glu Arg Glu Thr Tyr Leu Asp Arg Leu

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	850					855					860				
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Leu	Asn	Phe	Ile	Gly	Val	Val	Ala	Gly	Val	Ser	Asn	Ala	Ile	Asn	Asn
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Trp	Val	Ile	Val	His	Leu	Tyr	Pro	Phe	Leu	Lys	Gly	Leu	Val	Gly	Arg
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Gln	Asn	Arg	Thr	Pro	Thr	Ile	Val	Ile	Val	Trp	Ser	Ile	Leu	Leu	Ala
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